

This application is submitted in the name of the following inventors:

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Title of the Invention

Breast Restraint for Athletic Activity

Background of the Invention

1. Field of the Invention

This invention relates to a restraint and method for reducing discomfort experienced by female athletes. In particular, the invention relates to a restraint and method for reducing breast movement while exercising or performing other activities.

2. Description of the Related Art

Women often experience discomfort while exercising due to excessive breast movement, for example while running. This discomfort is particularly pronounced for women with larger breasts. In addition, excessive breast movement can actually break down breast tissue

over long periods of regular exercise or other physical activity. These matters are of serious concern to both amateur and professional female athletes.

Manufacturers of sports apparel have attempted to address this problem with sports bras. Such a sports bra is shown in Figure 5. However, these bras have proven to provide less than adequate relief.

(Ans. A1) If the bras are of a suitably stiff material to reduce unwanted breast movement, they tend to be uncomfortable. Manufacturers have attempted to address this problem by making sports bras out of an elastic material such as Lycra® ^{spandex}. However, for some women, especially women with larger breasts, this elasticity can actually add to unwanted breast movement. For other women, elastic sports bras simply do not provide adequate relief unless they are so elastic as to be uncomfortable. Even with such strong elastics, adequate relief may not be realized.

Summary of the Invention

(Ans. A2) Accordingly, what is needed is a restraint that reduces breast movement while a person exercises or performs other activities. The invention addresses this need through a restraint including a strap that fits across the tops of the person's breasts, under the person's arms, and around the person's back, and that also includes an adjustable fastener for fastening the strap together. At least part of the strap is sufficiently elastic so as to ensure a close fit, but is also sufficiently inelastic so that the restraint avoids contributing to movement of the breasts during exercising or other activities.

It has been found that having a sufficiently close fitting strap across the tops of the person's breasts provides great relief from excessive breast movement. In addition, because the strap is sufficiently inelastic, the invention does not exacerbate the problem of excessive breast movement. This is in contrast to conventional overly-elastic sports bras.

According to the invention, the strap preferably is at least one inch wide at a portion that fits across the tops of the breasts. The strap can be all of a uniform width, or the strap can be shaped so as to be wider at the portion that fits across the tops of the breasts, thereby increasing comfort. Other arrangements are possible.

Chs. A3 Preferably, the strap is all of a single elastic material and the fastener is a velcro fastener. The restraint can be adapted to be worn in addition to a bra. Alternatively, the strap of the restraint can be incorporated into a bra such as a sports bra.

This brief summary has been provided so that the nature of the invention may be understood quickly. A more complete understanding of the invention may be obtained by reference to the following description of the preferred embodiments thereof in connection with the attached drawings.

Brief Description of the Drawings

Figure 1 shows the invention in use with a sports bra.

Figure 2 shows a first preferred embodiment of the invention.

Figure 3 shows a second preferred embodiment of the invention.

Figure 4 shows the invention incorporated into a bra.

Figure 5 shows a prior-art sports bra.

Description of the Preferred Embodiment

Figure 1 shows the invention in use with a sports bra.

Ans. A47 Briefly, excessive breast movement is reduced while a female or other person exercises or performs some other activity. This reduction in movement is achieved through use of a restraint that includes a strap that fits across the tops of the person's breasts, under the person's arms, and around the person's back, and that also includes an adjustable fastener for fastening the strap together. At least part of the strap is sufficiently elastic so as to ensure a close fit, but is also sufficiently inelastic so that the restraint avoids contributing to movement of the breasts during exercising or other activities.

Thus, Figure 1 shows female 1 wearing sports bra 2 and restraint 3. Restraint 3 includes strap 4 that fits across the tops of breasts 5, under arms 6, and around the female's back 7. At least part of strap 4 is sufficiently elastic so as to ensure a close fit, but is also sufficiently

inelastic so that the restraint avoids contributing to movement of the breasts during exercising or other activities. Note that in a preferred embodiment, all of strap 4 is of a single elastic material.

It has been found that having a sufficiently close fitting strap across the top of the breasts provides great relief from excessive breast movement. In addition, because the strap is sufficiently inelastic, the restraint of the invention does not exacerbate the problem of excessive breast movement. This is in contrast to conventional overly-elastic sports bras.

ANS. 057 Restraint 3 also includes adjustable fastener 8, here shown fastened at the female's back 7. Fastener 8 preferably is a ~~VELCRO~~ fastener, allowing for easy adjustment and a suitably close fit. Of course, other fasteners can be used.

Figure 2 shows a first preferred embodiment of the invention. In this embodiment, restraint 10 includes strap 11 and fastener 12. Strap 11 preferably is at least one inch wide at a portion that fits across the tops of the breasts. In the embodiment shown in Figure 2, strap 11 is all of a uniform width. Figure 2 also shows a preferred fastener 12 made of ~~VELCRO~~.

Figure 3 shows a second preferred embodiment of the invention. In this embodiment, restraint 14 includes strap 15 and fastener 16. In the embodiment shown in Figure 3, strap 15 is shaped so as to be wider at the portion that fits across the tops of the breasts. This can provide increased comfort.

CNS. ab

Figure 3 also shows alternative fastener 16, namely spaced loops and aligned hooks. This fastener is similar to fasteners found on conventional bras. Fastener 16 is not limited to use with the embodiment shown in Figure 3; fastener 16 can be used with the other embodiments of the invention described herein. Likewise, a ~~Velcro~~ or other fastener can be used with the shaped restraint shown in Figure 3.

Velcro®

Figure 4 shows the invention incorporated into a bra. In Figure 4, bra 18 is a sports bra. Of course, the invention is not limited to use or incorporation with this type of bra.

In Figure 4, restraint 19 includes strap 20 and fastener 21. Restraint 19 is incorporated into bra 18, for example by having strap 20 sewn into or onto bra 18. Adjustable fastener 21 preferably is still present to allow for adjustment of the fit of restraint 19.

Alternative Embodiments

The invention has been described above in the context of use by females, and in particular female athletes. However, the invention is not limited to use by females, and the invention also is not limited to use by athletes. Any person who experiences discomfort from excessive breast movement can benefit from the invention.

The invention also encompasses the activity of fitting the restraint across the tops of a person's breasts, under the person's arms, and around the person's back, and fastening the strap together with an adjustable fastener.

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In addition, although preferred embodiments of the invention are disclosed herein, many variations are possible which remain within the content, scope and spirit of the invention, and these variations would become clear to those skilled in the art after perusal of this application.